

# CLAIMS

The following is claimed:

1. A system for determining a cause of a network problem between a first  
5 endpoint and a second endpoint, comprising:  
a first computer comprising;  
a transceiver;  
software stored within said first computer defining functions to be  
performed; and  
10 a processor configured by said software to perform the steps of,  
associating a received error message with an error identification  
number; and  
associating said error identification number with a root cause  
proximity value, wherein said root cause proximity value represents a relationship  
15 between said received error message and an actual cause of said network problem.
2. The system of claim 1, wherein said actual cause is selected from the  
group consisting of malfunction of hardware, malfunction of software, or problems with  
provided services associated with said network.
- 20 3. The system of claim 1, further comprising a database that stores said error  
identification number and said associated root cause proximity value.

4. The system of claim 1, wherein said root cause proximity value is used to filter said error messages prior to said error messages being transmitted.

5. The system of claim 1, wherein said root cause proximity value is within a range from a small numerical value to a large numerical value, wherein an error message having said small root cause proximity numerical value represents a symptom of said actual cause of said network problem, and an error message having said large root cause proximity numerical value is representative of hardware, services, or software that is said actual cause of said network problem.

6. The system of claim 1, wherein said processor is further configured by said software to perform the step of, associating said received error message with a detailed description of said error message.

7. The system of claim 6, wherein said detailed description of said error message is provided to said system prior to receiving said error message.

8. The system of claim 1, wherein said processor is further configured by said software to perform the step of, associating said received error message with a probable cause of said error message.

9. The system of claim 8, wherein said probable cause of said error message is provided to said system prior to receiving said error message.

10. The system of claim 1, wherein said processor is further configured by  
5 said software to perform the step of,  
associating said received error message with a remedial action of said error message.

11. The system of claim 10, wherein said remedial action of said error  
10 message is provided to said system prior to receiving said error message.

12. A system for determining a cause of a problem between a first device and a second device, comprising:

a first computer comprising;

15 a transceiver;

software stored within said first computer defining functions to be performed; and

a processor configured by said software to perform the steps of,

associating a received error message with an error identification

20 number; and

associating said error identification number with a root cause proximity value, said root cause proximity value representing a relationship between said received error message and an actual cause of said problem, wherein said root cause

proximity value is within a range from a small numerical value to a large numerical value, and wherein an error message having said small root cause proximity numerical value represents a symptom of said actual cause of said problem, and an error message having said large root cause proximity numerical value is representative of hardware, services, or software that is said actual cause of said problem between said first device and said second device.

13. A system for determining a cause of a network problem between a first endpoint and a second endpoint, comprising:

means for associating a received error message with an error identification number; and

means for associating said error identification number with a root cause proximity value, wherein said root cause proximity value represents a relationship between the received error message and an actual cause of said network problem.

14. The system of claim 13, wherein said actual cause is selected from the group consisting of malfunction of hardware, malfunction of software, or problems with provided services associated with said network.

15. The system of claim 13, further comprising means for storing said error identification number and said associated root cause proximity value.

16. The system of claim 13, wherein said root cause proximity value is used to filter said error messages prior to said error messages being transmitted.

17. The system of claim 13, wherein said root cause proximity value is within a range from a small numerical value to a large numerical value, wherein an error message having said small root cause proximity numerical value represents a symptom of said actual cause of said network problem, and an error message having said large root cause proximity numerical value is representative of hardware, services, or software that is said actual cause of said network problem.

18. The system of claim 13, further comprising means for associating said received error message with a detailed description of said error message.

19. The system of claim 18, wherein said detailed description of said error message is provided to said system prior to receiving said error message.

20. The system of claim 13, further comprising means for associating said received error message with a probable cause of said error message.

21. The system of claim 20, wherein said probable cause of said error message is provided to said system prior to receiving said error message.

22. The system of claim 13, further comprising means for associating said received error message with a remedial action of said error message.

23. The system of claim 22, wherein said remedial action of said error message is provided to said system prior to receiving said error message.

24. A method for determining a cause of a network problem between a first endpoint and a second endpoint, comprising the steps of:

associating a received error message with an error identification number; and

associating said error identification number with a root cause proximity value, wherein said root cause proximity value represents a relationship between said received error message and an actual cause of said network problem.

25. The method of claim 24, wherein said actual cause is selected from the group consisting of malfunction of hardware, malfunction of software, or problems with provided services associated with said network.

25. The method of claim 24, further comprising the step of storing said error identification number and said associated root cause proximity value.

26. The method of claim 24, wherein said root cause proximity value is used to filter said error messages prior to said error messages being transmitted.

27. The method of claim 24, wherein said root cause proximity value is within a range from a small numerical value to a large numerical value, wherein an error message having said small root cause proximity numerical value represents a symptom of said actual cause of said network problem, and an error message having said large root  
5 cause proximity numerical value is representative of hardware, services, or software that is said actual cause of said network problem.

28. The method of claim 24, further comprising the step of associating said received error message with a detailed description of said error message.

29. The method of claim 28, wherein said detailed description of said error message is provided prior to receiving said error message.

30. The method of claim 24, further comprising the step of associating said received error message with a probable cause of said error message.

31. The method of claim 30, wherein said probable cause of said error message is provided prior to receiving said error message.

32. The method of claim 24, further comprising the step of associating said received error message with a remedial action of said error message.

33. The method of claim 32, wherein said remedial action of said error message is provided prior to receiving said error message.

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